

**CAPACITIVE RELAY TAKEOFF
SWIMMING PLATFORM SENSOR SYSTEM**

PARTS LIST

10	capacitive relay takeoff swimming platform sensor system	36	scoreboard
		38	banana plug
12a-n	swimming lane stations	40	cable
		42	jack
14	swimming pool	44	jack
16	relay takeoff swimming platform	46	cable
		48	control buttons
18	sensing mat	50	conductive exterior layer
18a	horizontally oriented portion	52	conductive sense electrode
18b	vertically oriented portion	54	charge-transfer touch integrated circuit
20	housing		
22	sensor circuit	56	conductive ground electrode
24	touchpad		
26	touchpad sensor	58	insulator layer
		60	insulator layer
28	lane module	62	insulator layer
30	cable	64	capacitive monitor circuit
31	plugs	65	resistor
32	timer	66	sampling capacitor
34	start system		

67	resistor	98	input filter capacitor
68	RC circuit	100	diode
70	capacitor	102	resistor
72	resistor	104	resistor
74	switching transistor	106	diode
76	diode	108	output filter capacitor
78	diode	110	bypass capacitor
80	battery circuit	111	Zener diode
82	lithium battery	112a-n	programming cables
83	regulated power supply		
84	battery		
86	battery		
87	battery test circuit		
88	test switch		
89	switching transistor		
90	LED		
92	battery protection circuit		
94	switching transistor		
95	switching transistor		
96	diode		
97	diode		

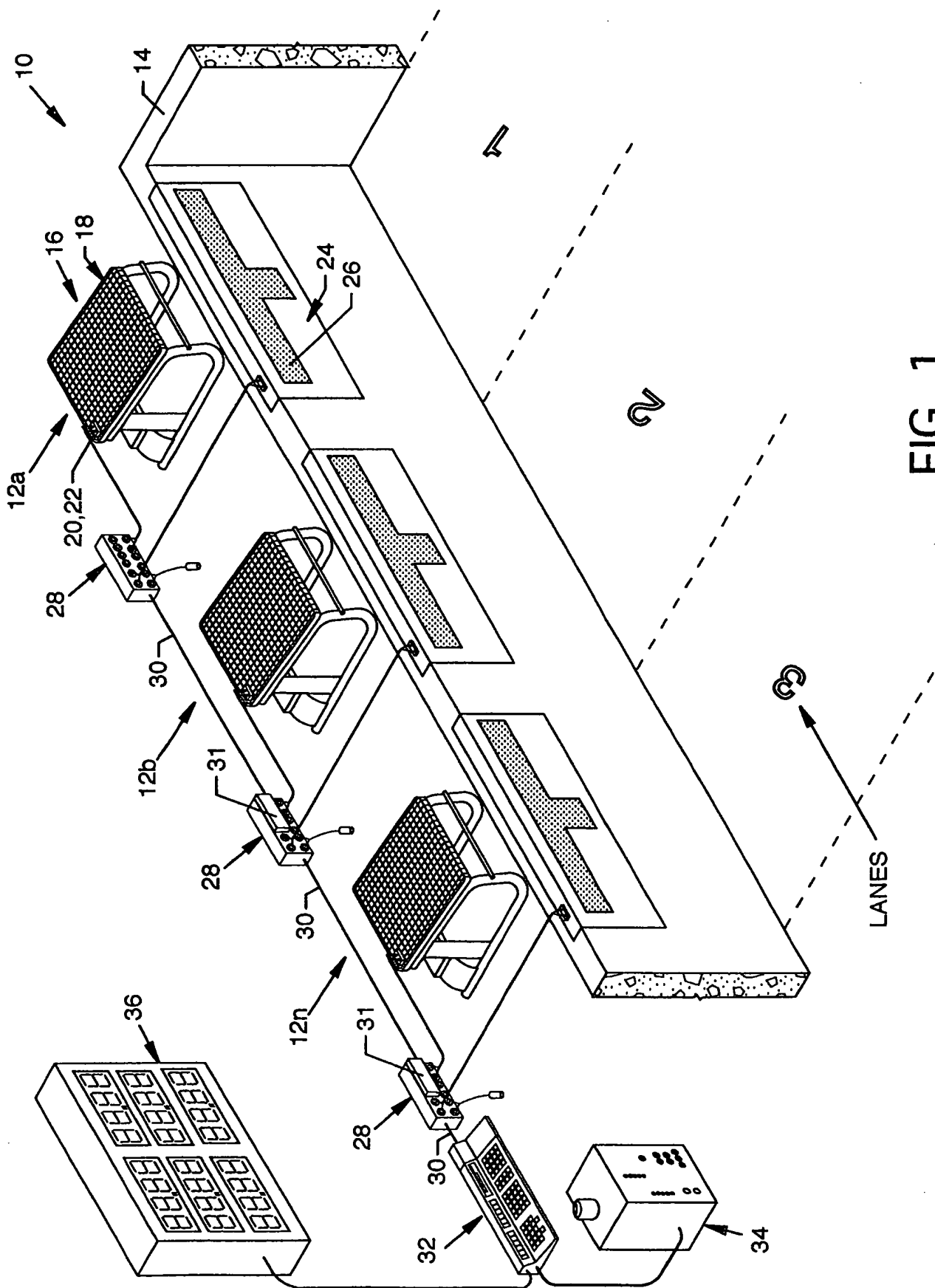


FIG. 1

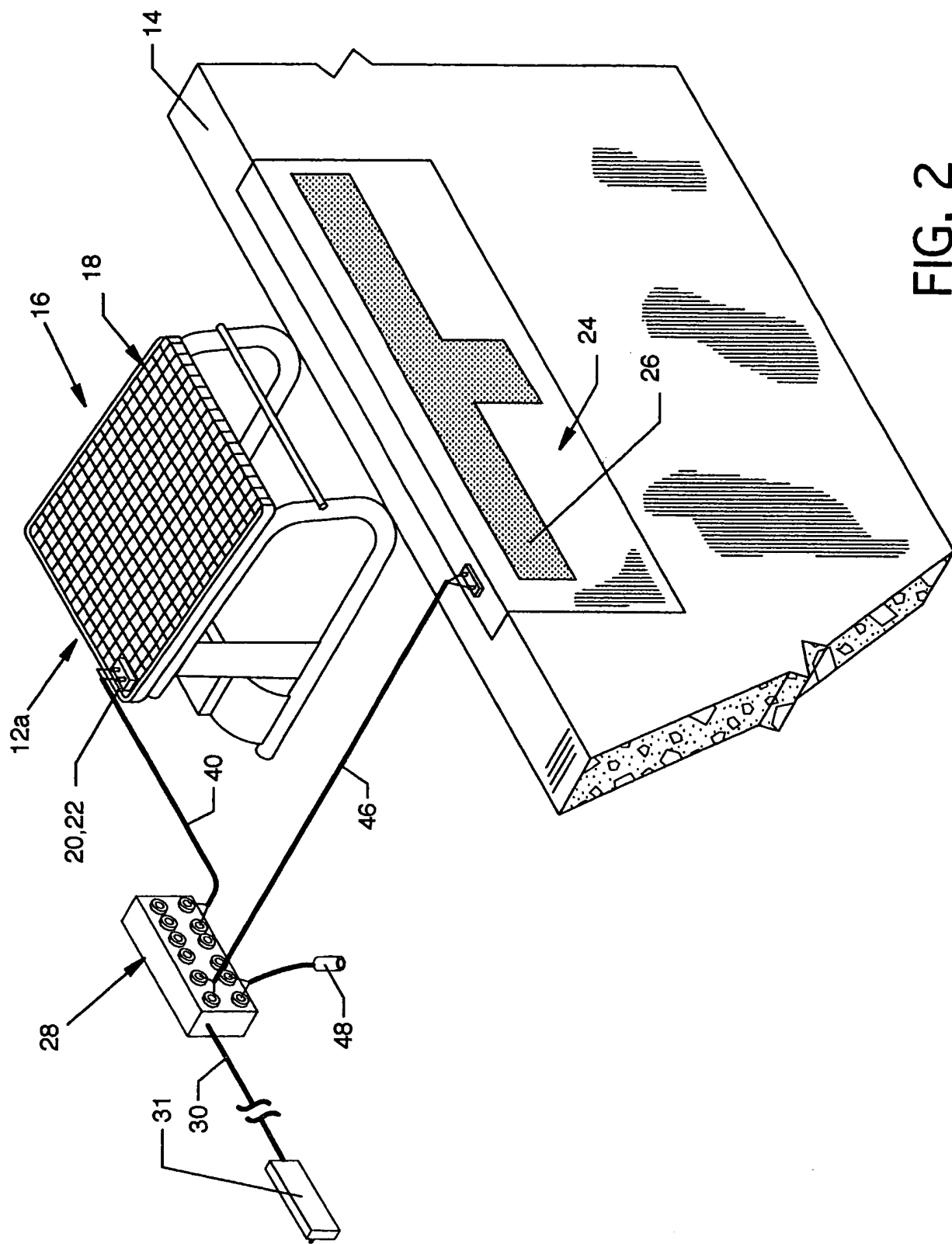


FIG. 2

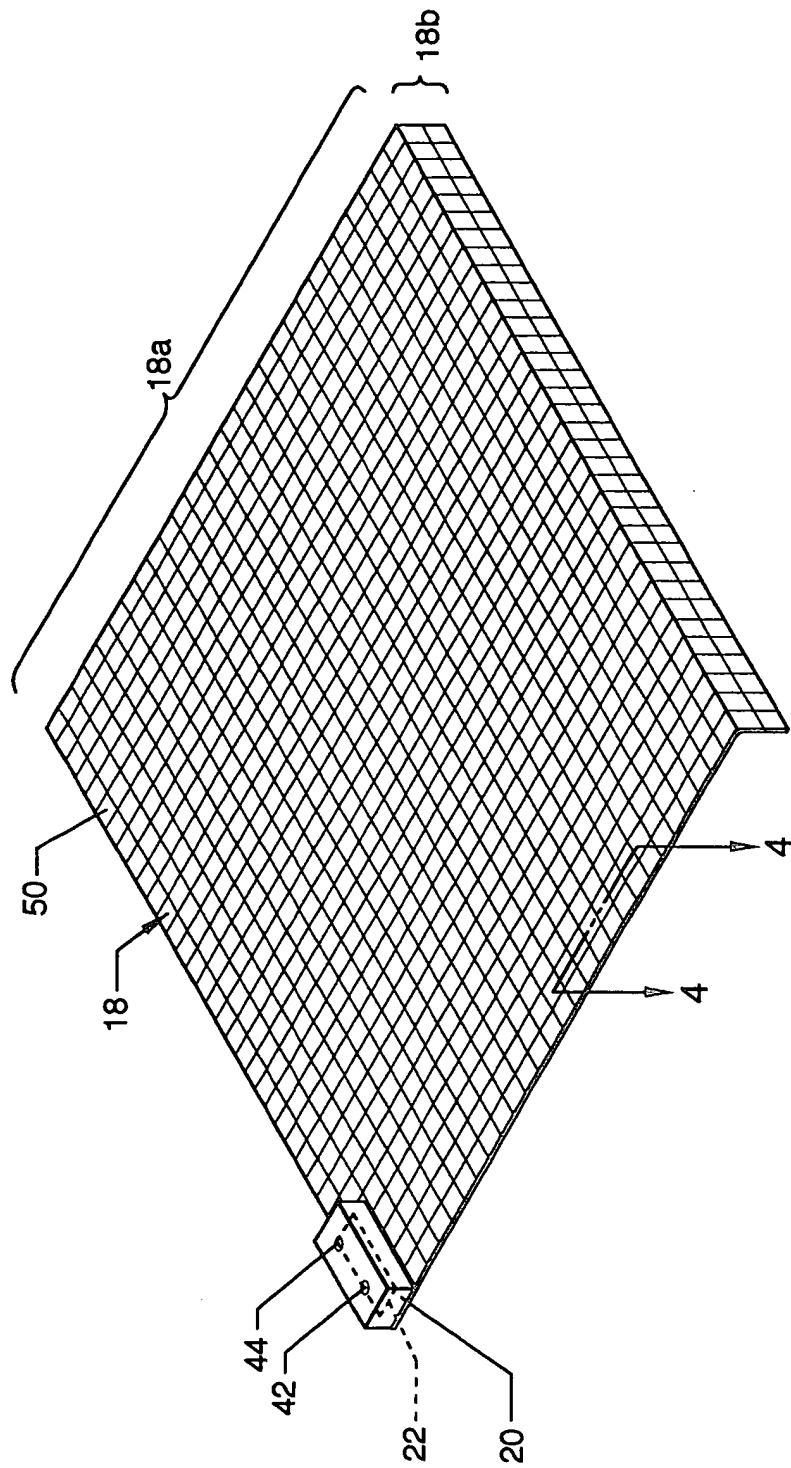


FIG. 3

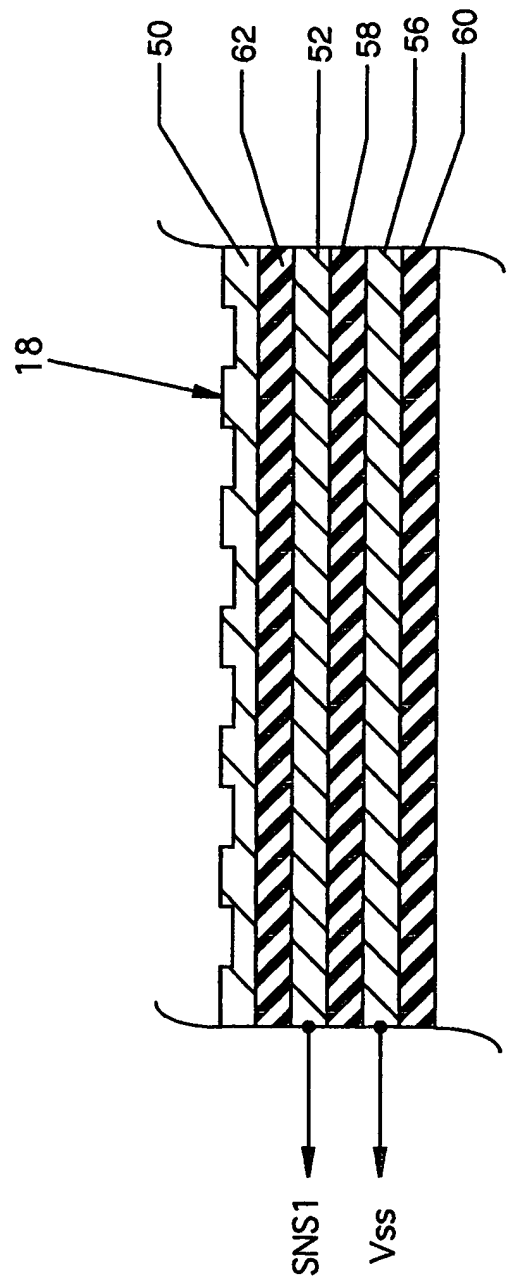


FIG. 4

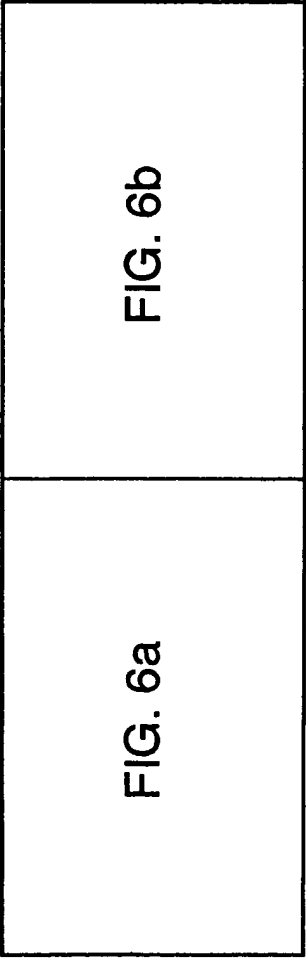


FIG. 5

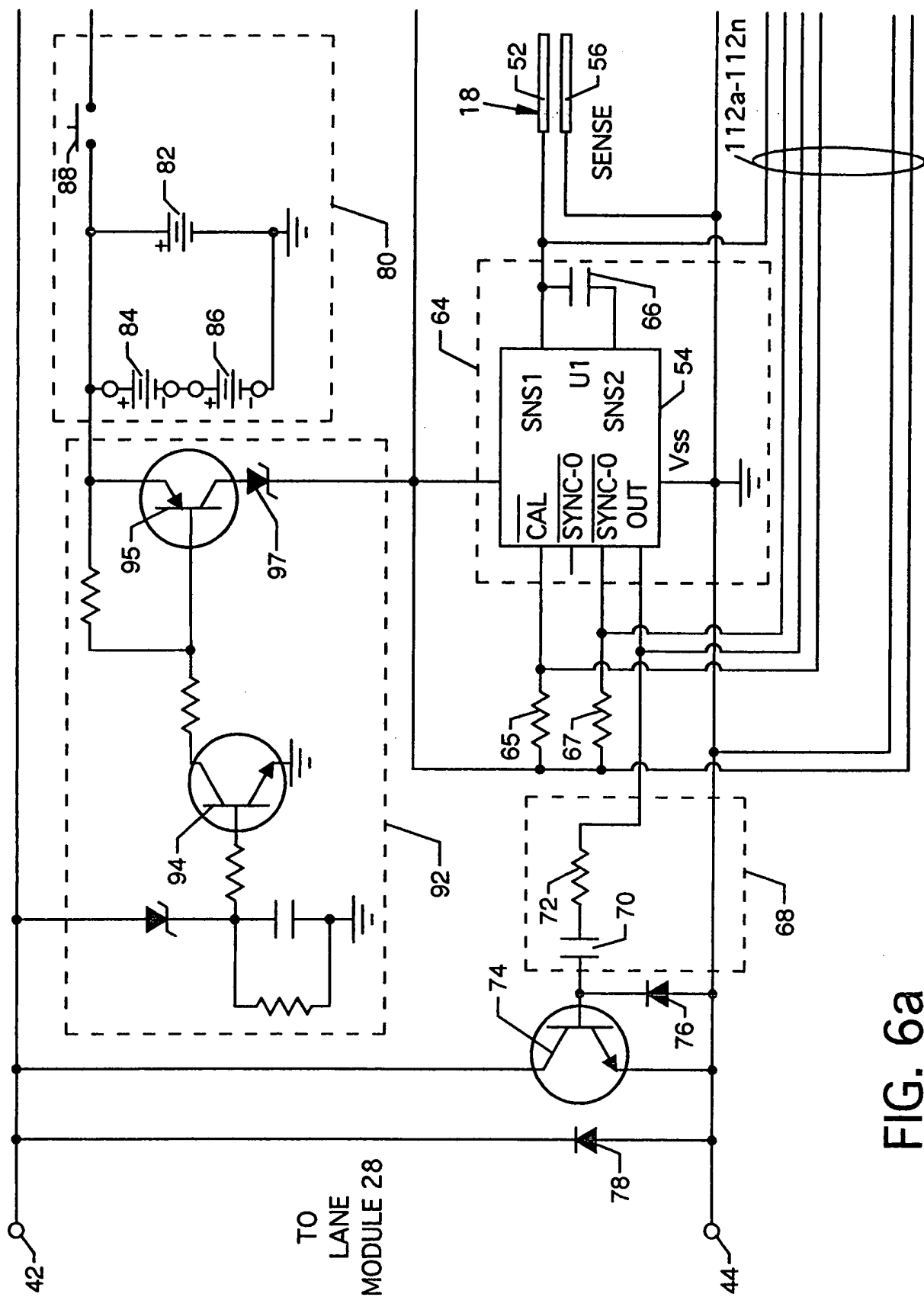


FIG. 6a

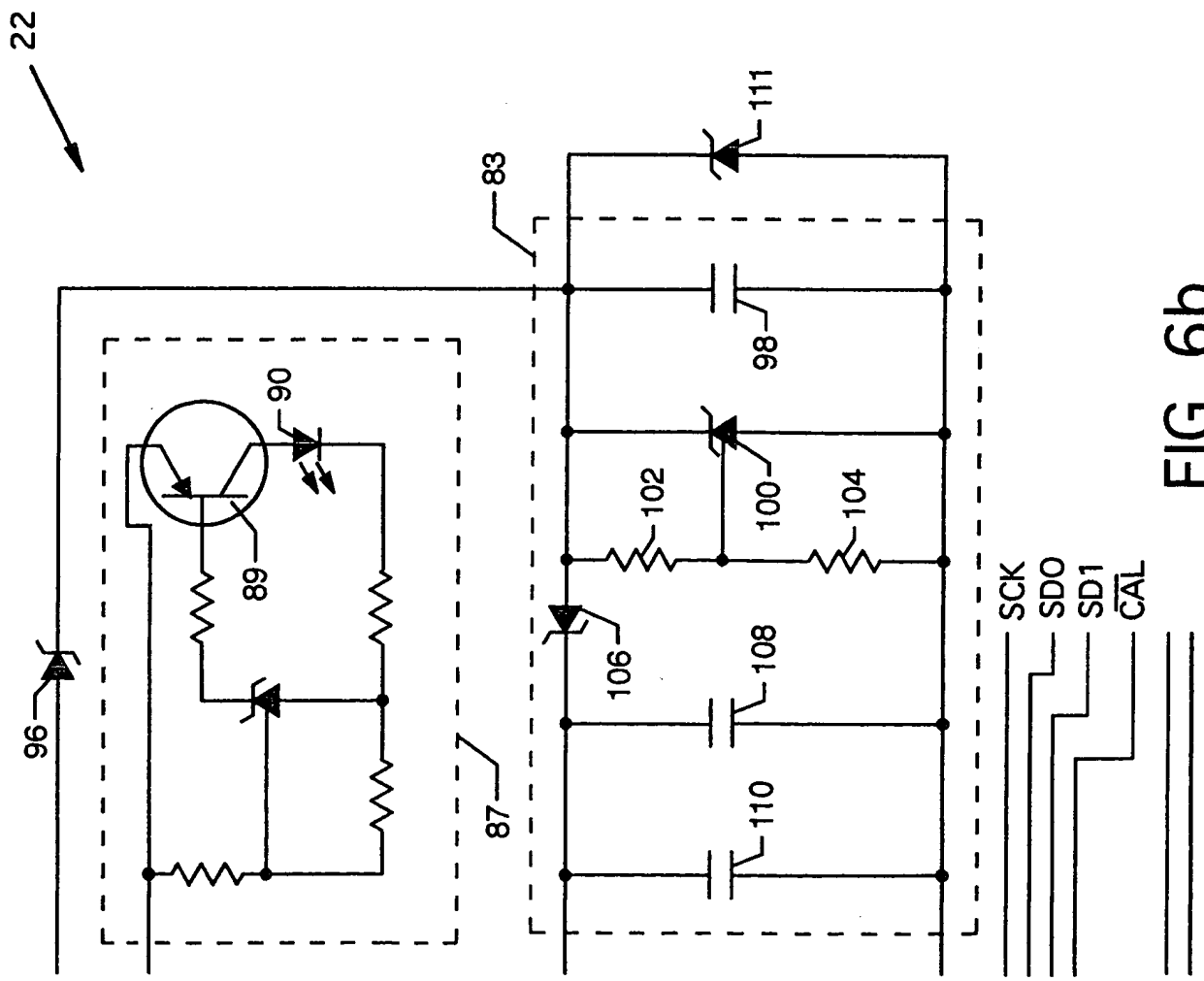


FIG. 6b

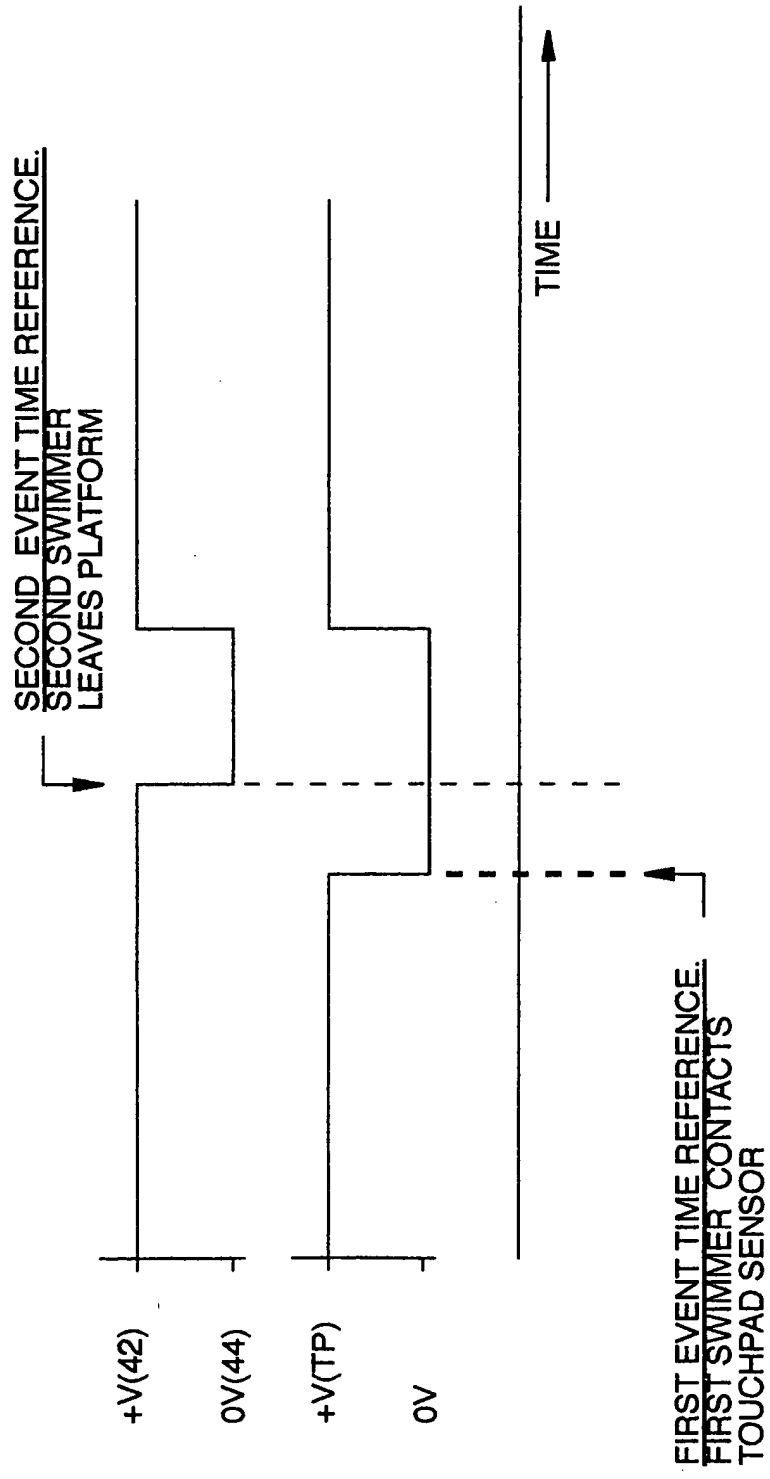


FIG. 7

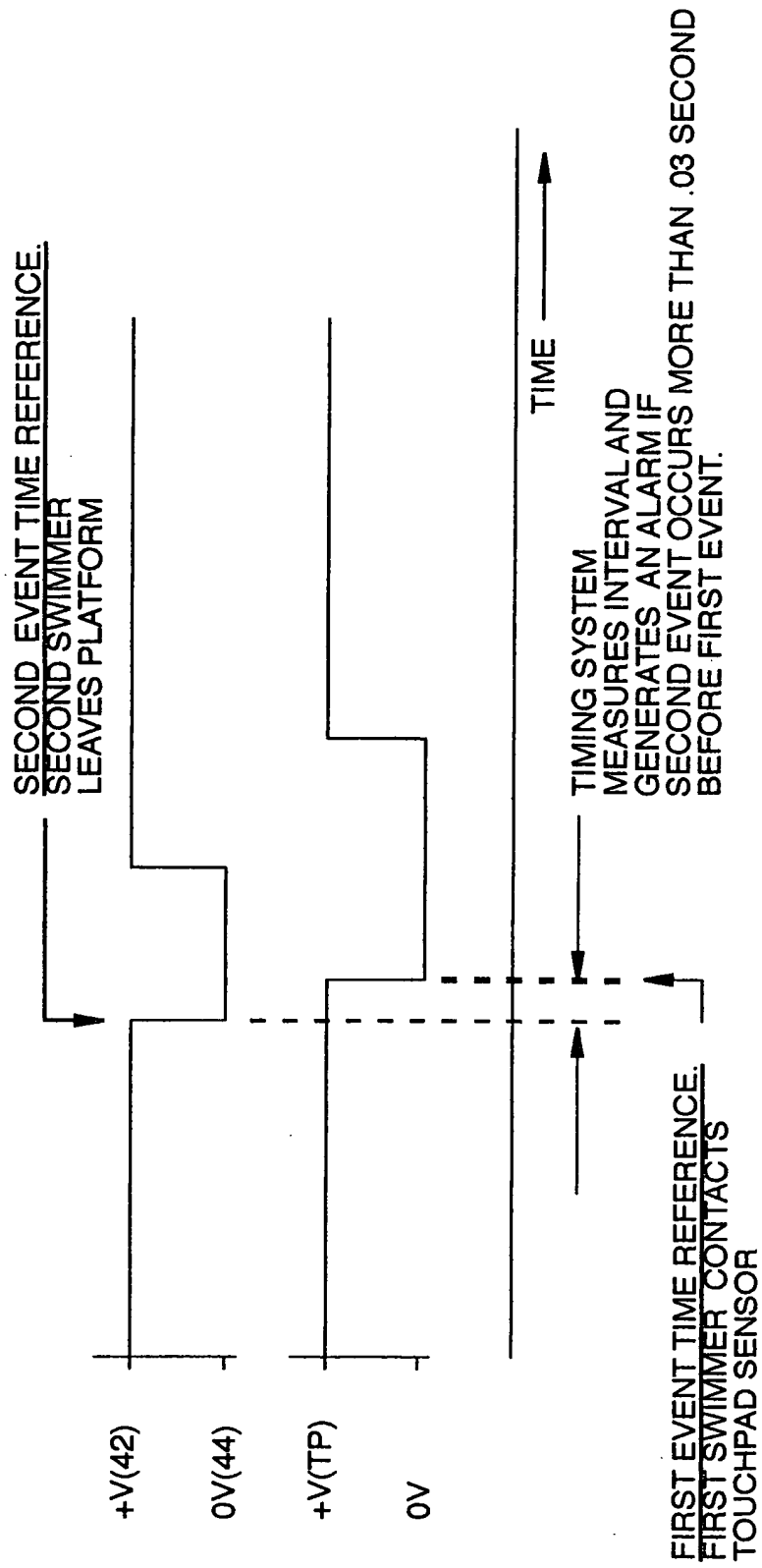


FIG. 8